

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) An isolated nucleic acid molecule consisting essentially of a nucleic acid sequence selected from the group consisting of:
 - a) at least fifteen contiguous nucleotides of SEQ ID NO:6, wherein said sequence includes nucleotide 32, 159, 298, 340, or 462 of SEQ ID NO:6, with the proviso that the nucleotide at position 32 is guanine, the nucleotide at position 159 is thymine, the nucleotide at position 298 is guanine, the nucleotide at position 340 is thymine, or the nucleotide at position 462 is guanine; and
 - b) ~~at least fifteen contiguous nucleotides of SEQ ID NO:1, wherein said sequence includes nucleotide 1895, 2254, 2510, or 2651 of SEQ ID NO:1, with the proviso that the nucleotide at position 1895 is thymine, the nucleotide at position 2254 is cytosine, the nucleotide at position 2510 is adenine, or the nucleotide at position 2651 is adenine;~~
 - c) ~~at least fifteen contiguous nucleotides of SEQ ID NO:1, wherein said sequence includes nucleotide 3692 or 3693 of SEQ ID NO:1, with the proviso that the nucleotide at position 3692 is thymine or the nucleotide at position 3693 is adenine;~~
 - d) ~~at least fifteen contiguous nucleotides of SEQ ID NO:1, wherein said sequence includes nucleotide 1102, 1301, 1303, or 1464, or 1509 of SEQ ID NO:1, with the proviso that the nucleotide at position 1102 is thymine, the nucleotide at position 1301 is cytosine, the nucleotide at position 1303 is adenine, the nucleotide at position 1464 is adenine, or the nucleotide at position 1509 is adenine; and~~
 - e) the complement of a), b), c), or d).
- 2-6. (Cancelled)
7. (Withdrawn) The isolated nucleic acid molecule of claim 1, wherein said nucleotide sequence is at least fifteen contiguous nucleotides of SEQ ID NO:6, wherein said

- sequence includes nucleotide 159 of SEQ ID NO:6, with the proviso that the nucleotide at position 159 of SEQ ID NO:6 is thymine.
8. (Previously Presented) The isolated nucleic acid molecule of claim 1, wherein said nucleotide sequence is at least fifteen contiguous nucleotides of SEQ ID NO:6, wherein said sequence includes nucleotide 298 of SEQ ID NO:6, with the proviso that the nucleotide at position 298 of SEQ ID NO:6 is guanine.
9. (Withdrawn) The isolated nucleic acid molecule of claim 1, wherein said nucleotide sequence is at least fifteen contiguous nucleotides of SEQ ID NO:6, wherein said sequence includes nucleotide 340 of SEQ ID NO:6, with the proviso that the nucleotide at position 340 of SEQ ID NO:6 is thymine.
10. (Withdrawn) The isolated nucleic acid molecule of claim 1, wherein said nucleotide sequence is at least fifteen contiguous nucleotides of SEQ ID NO:6, wherein said sequence includes nucleotide 462 of SEQ ID NO:6, with the proviso that the nucleotide at position 462 of SEQ ID NO:6 is guanine.
11. (Original) An isolated nucleic acid encoding a PNMT polypeptide, wherein said polypeptide comprises a PNMT amino acid sequence variant relative to the amino acid sequence of SEQ ID NO:8, and wherein said amino acid sequence variant is at a residue selected from the group consisting of 9, 98, and 112.
12. (Original) The isolated nucleic acid of claim 11, wherein said amino acid sequence variant is a serine at residue 9, an alanine at residue 98, or a cysteine at residue 112.
- 13-37. (Cancelled)
38. (Previously Presented) The isolated nucleic acid molecule of claim 1, wherein said isolated nucleic acid molecule is from 15 to 100 nucleotides in length.

39. (Previously Presented) The isolated nucleic acid molecule of claim 1, wherein said isolated nucleic acid molecule is from 20 to 50 nucleotides in length.
40. (Previously Presented) A vector comprising the nucleic acid molecule of claim 1.
41. (Previously Presented) The vector of claim 40, wherein said nucleic acid molecule is from 20 to 50 nucleotides in length.